

BOOK REVIEWS

neurochemical subtleties. Lengthy discussion is published verbatim and in general enhances the value of the papers. A major justification of the duplicate publication usually involved in printing symposia proceedings is the orientation provided in the field by bringing together related work, not merely in juxtaposition, but under evaluative discussion by leading investigators within and across disciplines. In this case comment was incisive and much remains cogent.

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SCREENING METHODS IN PHARMACOLOGY. By Robert A. Turner. New York, Academic Press, 1965. xv, 332 pp. \$12.00.

This book is directed chiefly to those engaged in the pharmacological screening of potentially useful chemical agents. It offers, in addition to a section on the general principles of screening, detailed descriptions of most of the modern techniques used to detect useful pharmacological properties. Frequent bibliographic reference to the original literature is made and an appendix includes an outline of some statistical methods for the evaluation of data obtained. The tests are classified according to the pharmacological action under study and include "classical" as well as newer methods. In most sections, several methods are described; unfortunately, the reader is only rarely given a critical assessment of the relative merits of the different methods. Numerous errors in discussions of the basic pharmacology underlying tests detract from the book's merit. For example, there is no evidence to support the statements that tryptamine may act by releasing epinephrine or that substances potentiating the pressor response to injected epinephrine may have "antiamine oxidase" activity. Also it is incorrect to state that cocaine potentiates catecholamine actions by preventing their "absorption" by tissues. Competitive ganglionic blocking agents are described vaguely as those that block without producing depolarization. Although this definition is correct, it is so superficial as to be valueless. An introductory chapter supposedly dealing with the biochemistry of the nervous system (and, in fact, discussing the concept of chemical transmission and some aspects of autonomic pharmacology) is quite misleading. One reads, for example, that the transmitter is bound to and may then *depolarize* the receptor, and that epinephrine and norepinephrine *catalyze* the action of indirectly acting sympathomimetic amines such as tyramine and amphetamine. The necessity for including a chapter dealing with autonomic pharmacology is unquestioned; however, those responsible for the organization of screening programs will have (or will certainly require) a much clearer knowledge of the subject than is presented in this chapter.

If the many errors are ignored and the author's relatively uncritical approach is accepted, then the book provides a useful source of information on the multitude of tests available for the detection of pharmacological activity.

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